

NASA Center for Climate Simulation: Data Supporting Science Science Mission Directorate

Debuted in spring 2010, the NASA Center for Climate Simulation (NCCS) is the new name for a Goddard Space Flight Center organization that has served NASA scientists and engineers for over 25 years.

NCCS offers integrated supercomputing, visualization, and data interaction technologies to enhance Agency capabilities in weather and climate prediction. Its centerpiece is the Discover supercomputer, which recently doubled in capability to nearly 30,000 processors and 320 teraflops peak performance.

In addition to a powerful supercomputer, NCCS supports users with a massive data archive, a new data management system, expanded data analysis and visualization capabilities featuring a 17-ft. by 6-ft. visualization wall, and services for distributing simulation data to users and the broader climate research community.

Among other benefits, NASA weather and climate simulations help to determine the optimal use of the latest satellite observations in predictions, ultimately leading to increased accuracy of weather and climate forecasts by operational agencies such as the National Oceanic and Atmospheric Administration (NOAA) and its National Weather Service.

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The NASA Center for Climate Simulation (NCCS) Data Exploration Theater features a 17-ft. by 6-ft. multi-screen visualization wall. Here, the wall displays a 5-kilometer-resolution global simulation capturing the massive snowstorms that hit the eastern United States in February 2010. *Pat Izzo, NASA/Goddard*

